

11A

Notice of Allowability

Application No.

10/787,483

Examiner

Yaritza Guadalupe McCall

Applicant(s)

KIKUCHI ET AL.

Art Unit

2859

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amendment filed November 15, 2005.
2. ☒ The allowed claim(s) is/are 1-29.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date <u>3/19/04</u> | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

DETAILED ACTION

In response to Amendment filed November 15, 2005

Reasons for Allowance

1. The following is an examiner's statement of reasons for allowance:
 - a. Claims 1 - 9 are allowable over the Prior Art of Record because it fails to teach or suggest a multi-joint coordinate measuring system comprising a warning indicator that warns a user in response to a determination of an angle between the first and second links, a determination of a distance from a supporting point of the measuring arm to a head point of the measuring arm, and a detection of at least one of first and second conditions, the first condition being that the determined angle between the first and second links exceeds a first value and the second condition being that the determined distance from the supporting point of the measuring arm to the head point of the measuring arm exceeds a second value in combination with the remaining limitations of the claims.

b. Claims 10 - 12 are allowable over the Prior Art of Record because it fails to teach or suggest a multi-joint coordinate measuring system comprising a warning indicator that warns a user in response to a detection of a condition that the shoulder joint provides the second link with a bending motion beyond a range determined based on the force generated by the counter balance in combination with the remaining limitations of the claims.

c. Claims 13 – 16 and 26 - 27 are allowable over the Prior Art of Record because it fails to teach or suggest a method of controlling measurement by a multi joint coordinate measuring system, the method comprising the step of storing a prescribed value concerning a posture of the measuring arm, the prescribed value having been determined such that a measurement error due to a user action pulling the measuring arm away from the support member would become within an allowable range in combination with the remaining limitations of the claims.

d. Claims 17 – 19 and 29 are allowable over the Prior Art of Record because it fails to teach or suggest a method of controlling measurement by a multi joint coordinate measuring system, the method comprising the step of storing a prescribed value concerning a posture of the measuring arm, the prescribed value having been determined such that a measurement error due to a user action moving the measuring arm with a change in the force applied to the measuring arm by the counter balance would become within an allowable range in combination with the remaining limitations of the claims.

e. Claims 20 - 22 are allowable over the Prior Art of Record because it fails to teach or suggest a multi-joint coordinate measuring system comprising a processor configured to input an angle of each joint of the measuring arm into a formula to produce a three dimensional coordinate corresponding to a position of the probe, the formula including a term for correcting an error due to a change of the force generated by the counter balance in combination with the remaining limitations of the claims.

f. Claim 23 is allowable over the Prior Art of Record because it fails to teach or suggest a method of measuring a three dimensional coordinate by a multi joint coordinate measuring system, the method comprising the step of calculating from the input data a three dimensional coordinate corresponding to a position of the probe, by a formula including a term for correcting an error due to a change of the force generated by the counter balance in combination with the remaining limitations of the claims.

g. Claim 24 is allowable over the Prior Art of Record because it fails to teach or suggest a multi-joint coordinate measuring system comprising a memory that outputs a prescribed value concerning a posture of the measuring arm, the prescribed value having been determined such that a measurement error due to a user action pulling the measuring arm away from the support member would become within an allowable range in combination with the remaining limitations of the claims.

- h. Claim 25 is allowable over the Prior Art of Record because it fails to teach or suggest a multi-joint coordinate measuring system comprising a memory that outputs a prescribed value concerning a posture of the measuring arm, the prescribed value having been determined such that a measurement error due to a user action moving the measuring arm with a change in the force applied to the measuring arm by the counter balance would become within an allowable range in combination with the remaining limitations of the claims.
 - i. Claim 28 is allowable over the Prior Art of Record because it fails to teach or suggest a multi-joint coordinate measuring system comprising a warning indicator that warns a user in response to a determination of a distance of the measuring arm's reach and a detection of a condition that the determined distance exceeds a prescribed value in combination with the remaining limitations of the claims.
- 2. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

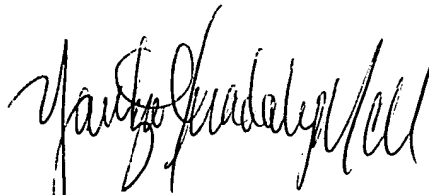
Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yaritza Guadalupe McCall whose telephone number is (571)272-2244. The examiner can normally be reached on 8:00 AM - 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego F.F. Gutierrez can be reached on (571) 272-2245. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

YGM
January 3, 2006


Yaritza Guadalupe-McCall
Patent Examiner
Art Unit 2859